## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|---|---|
| In re Patent Application of | )   **MAIL STOP SEQUENCE** |
| | ) |
| Frank Roesl et al. | )   Group Art Unit: 1635 |
| | ) |
| Application No.: 09/899,276 | )   Examiner: JON E. ANGELL |
| | ) |
| Filed: July 6, 2001 | )   Confirmation No.: 3914 |
| | ) |
| For:   NOVEL REGULATORY SEQUENCES | ) |
|       OF THE MCP-1 GENE | ) |

*(Stamp: OIPE — MAR 2 2 2005 — PATENT & TRADEMARK OFFICE)*

## DECLARATION PURSUANT TO
## 37 C.F.R. §§ 1.821-1.825

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Deborah H. Yellin, declare as follows:

1.    That the content of the paper and computer-readable copies of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.821(c) and (e), respectively, are the same, in compliance with § 1.821(f).

2.    That the submission, filed in accordance with 37 C.F.R. § 1.821(g), herein does not include new matter.

I hereby declare that all statements made herein of my own knowledge are true and that all statements were made on information and belief and are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

March 22, 2005
_____
Date

*(signature)*
_____
Deborah H. Yellin
Registration No. 45,904

SEQUENCE LISTING
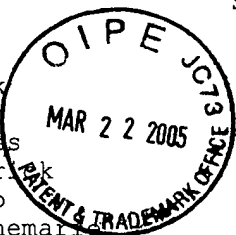
<110> Roesl, Frank
      Soto, Ubaldo
      Coy, Johannes
      Finzer, Patrick
      Delius, Hajo
      Poustka, Annemarie
      zur Hausen, Harald
      Patselt, Andrea

<120> Novel Regulatory Sequences of the MCP-1 Gene

<130> 012627-023

<140> US 09/899,276
<141> 2001-07-06

<150> EP 00 114 560.6
<151> 2000-07-06

<160> 13

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 600
<212> DNA
<213> Homo sapiens

<400> 1
taggaaaatt ataggatcat taagaaagga gaaggaagag tgggagcaaa tacctggagg 60
tagaaatggt gatgatgtgt acatcaagca gggagaaaac caatgaacca gatgcgaatt 120
cgggcccaca ccaatgtcaa gggatgacaa ttagaaagga aggttgagtc aagggatttg 180
aatgttaggg tgaaaagtta ctactcaact ctgtaggtta aaaggaaacg ttgagaatct 240
tcagtccaat gaggagggat gtgccatgtt tagagattca gagataagtt tcaggaaatg 300
taacttatag attttataca tacacagaga aatacggact agtgagaagc tattgccatg 360
gtccaagcaa gagatgatga aggcctaaat atggagccaa agaggcagca atgaagaatg 420
agccatgcag ggtgaaatgc tgcatgttgt aaatggagga gaaagacctg tgacttcaga 480
tatgaaaacc tcatcttcaa cccacatttt aaggggggcag cttccctgaa accagaatgt 540
gtttccctcc attactatac ccccatccca atctcaggca cctggaatca tccatttaaa 600

<210> 2
<211> 200
<212> DNA
<213> Homo sapiens

<400> 2
tgcagctaac ttattttccc ctagctttcc ccagacacct tgtttttattt tattataatg 60
aattttgttt gttgatgtga aacattatgc cttaagtaat gttaattctt atttaagtta 120
ttgatgtttt aagtttatct ttcatggtac tagtgttttt tagatacaga gacttgggga 180
aattgctttt cctcttgtac 200

<210> 3
<211> 150
<212> DNA
<213> Homo sapiens

```
<400> 3
caaagatcac attctagctc tgaggtatag gcagaagcac tgggatttaa tgagctcttt 60
ctcttctcct gcctgccttt tgctttttcc tcatgactct tttctgctct taagatcaga 120
ataatccagt tcatcctaaa atgctttttc                                  150


<210> 4
<211> 250
<212> DNA
<213> Homo sapiens


<400> 4
aggcttctat gatgctacta ttctgcattt gaatgagcaa atggatttaa tgcattgtca 60
gggagccggc caaagcttga gagctccttc ctggctggga ggccccttgg aatgtggcct 120
gaaggtaagc tggcagcgag cctgacatgc tttcatctag tttcctcgct tccttccttt 180
tctgcagttt tcgcttcaca gaaagcagaa tccttaaaaa taaccctctt agttcacatc 240
tgtggtcagt                                                        250


<210> 5
<211> 300
<212> DNA
<213> Homo sapiens


<400> 5
aaggaggagg cagtgggcta ggagaatcga gagatcagaa ttttaaactc agcccagcca 60
ttaacatgcc tcaagtactc ctatcatatt tgtaagagac aacagttcac tgaaatgaat 120
tctaaggtct ttgggttttt atcagtgtgc ttctgtagtt tctgaggaaa tctaaggcac 180
aactgaggaa tgaagtcagg ctttccaatt cccgaaatac tcctccactg cttactcatg 240
tcccttggaa attaagaagg aagccaggag catagctgcc ataaccaggg atgaacttct 300


<210> 6
<211> 300
<212> DNA
<213> Homo sapiens


<400> 6
aaaatataaa aattagccag gcgtgatgtc atgtgcctgt agtcccagct actcgggagg 60
ctgaggcagg agaacctctt gaatccagga ggcgcaggtt gcagtgagca gagatagtgc 120
cactgcactc cagcctgggt gacagagtga gactctgtct caaaaaaata aaataaaata 180
aaaaatgcag actgtgattc agcaggtctg ggttgaagcc cagaactctc tgataaattc 240
aatggcactt aactacttgg aggtcatgga tgcctttgct aatctaatag aagctactga 300


<210> 7
<211> 650
<212> DNA
<213> Homo sapiens


<400> 7
ggcttgtgcc gagatgttcc cagcacagcc ccatgtgaga gctccctggc tccgggccca 60
gtatctggaa tgcaggctcc agccaaatgc attctcttct acgggatctg ggaacttcca 120
aagctgcctc ctcagagtgg gaatttccac tcacttctct cacgccagca ctgacctccc 180
agcgggggag ggcatctttt cttgacagag cagaagtggg aggcagacag ctgtcacttt 240
ccagaagact ttcttttctg attcataccc ttcaccttcc ctgtgtttac tgtctgatat 300
atgcaaaggc caagtcactt ccagagatg acaactcctt cctgaagtag agacatgctt 360
ccaacactca gaagcctatg tgaacactca gccagcaaag ctggaagttt ttctctgtga 420
ccatgggcta attggtctcc ttctctggat tgtggcttat cagataaaaa caagtgagtc 480
atgccacagg atgtctataa gcccattgat tctgggattc tatgagtgat gctgatatga 540
ctaagccagg agagacttat ttaaagatct cagcatcttt cagcttgtta acctagagaa 600
```

aacccgaagc atgactggat tataaaggga aattgaatgc ggtccaccaa                    650

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Part of 3'-DHSR

<400> 8
ggaaggttga gtcaaggatt                                                     20

<210> 9
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 9
gataaggtga ctcagaaaag g                                                   21

<210> 10
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 10
ggaaggttga gtcaagggat t                                                   21

<210> 11
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 11
cgcttgatga ctcagccgga a                                                   21

<210> 12
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 12
ttttggattg aagccaatat gataa                                              25

<210> 13
<211> 11793

<212> DNA
<213> Homo sapiens

<400> 13
```
ggtacctcct ccagccttgg ccacagtgtc atccttgggc cccctaggtt tcagcctctt 60
gagtttgcac ttgcaggttt ggctgttgct ctcaaagcag gactattgca tcaacatggc 120
aggtgcagag gtcttcccgc ctcaatcgtc acccactgat ttctctgcca tggccttgaa 180
ctcaggcgac caatccagtt ggaacctccc cacactctcc gtggctaata attttggact 240
cagaagaaaa agcctcaatt tctctcctct caggaggtct cttggtcctt gagcaaatgt 300
atccatttct tctcctatct ccagtctttg ggcccccaaa ggtttttttc tccctttctc 360
caggacaatg agtgcctatt tacaagtgcc tgtttctact tgaataaggt ttctataaac 420
taagaagtgt tccttaggga cacaagtaac tggcactcct gttggaaaat gctaagatct 480
aggtcacgcg cacttccccc aacagacaca tacacacatt cacacacaca cacacacaca 540
cacacacaca cacacacaca cacacataca gcttgtctgc actctagcac tggcactgac 600
gctaacgcta taatcctggg caactttatt tccccatctt acattaagca gtggtgcagg 660
gattttcaac tctgggatct ctatcacacc tcccagctct gattgcttcc taatttacat 720
atttattgag catctgatgc taggtcctca tgctggtgat gcaggagtaa actagacaga 780
caaaagtccg tgccccacat tgtctgacac ctacacacct gctgttcgga ctccattaca 840
aacagctcca aggggaacag tgcacttgta aagtttctct cattaccatg gccacatccg 900
tgagcaataa ataagttgca tagttgaatt atttgataat gctttgtttt taactccctg 960
cacttaagtc agagatgtgt gtgctttgga aaactatttc tcctgactca ttagacaaat 1020
actatttgca tttttattca gcttccttcc tcagactcta atttacagta aaggcaagag 1080
gatttttgaa tggagccagt gctttgcaat gtggggctcc accagctagc cgactgaaat 1140
cattaataaa gaagcctttt taagtggctg aagtttcccc tttttggcat gcaacatttt 1200
gcaaccaagc ggaagaaaca tcatccgcaa agaagaatcc atgtggcccc tgaaaatcac 1260
tctctctgct acaggctccc cactccccag tgctcccctt agccctgcca ctatctctcc 1320
tccagatgga aaaagtgagg aactcaggga accaaaagtc ttgcttcttt actaatttcc 1380
ctgtctgaca ttaaatcatc ctacagttca gatatctggg ggaagtgact agagattctt 1440
gaactgttaa taattaattt aaatgatatt tgttaagaac ctacgacatg gaagatactg 1500
taccaggtgc tggggtccag catggcaaa ggcctcaagg tggaatggag ctatggtgtg 1560
ttctggaagc agagagtggg gctgagggtg acatgaggtg aggagacagg agagggcctg 1620
gcagggtggg accttctggt gagagctggc tgctgtgtga ggagctgagg ccctggcttg 1680
attctggggt tacttctttg accttcagct ttttgtcatg ggcagacaga atggggatga 1740
aaaaaagctt aggaaatgga aacctcccta tgcattatat aataaaaatg gccaacacat 1800
tttcatagca agaaatcaca gcagaagctt gtactgggca tcaggactgt aggcatccaa 1860
tgcccagaaa ctggcatgtg ccctgggaca tcccctgaga aggcatgcca cgagccctca 1920
gactgacaca gctctttaca agttgcttac agagcactct tggtttatta attcatacaa 1980
gtctcatgac aatgtcagaa gcagctgtct tactaatccc ctttgacaga agaggcccag 2040
agaggtcaag ggacttgctc aaggccacac agctagaaag aggcagagcc aggcctttgg 2100
ccctggtgtt ctgacaccac ctggggctcc ttctgttatt ccatgctacc tcttctttct 2160
cttccgtatt cccttctcgt tcccttcctt cttgtgtctt gcttcttatc tgcctgtact 2220
tattcctgtt ggtgcctccc agctcagcca gcatagctct gtcttcaaat accccatgct 2280
tcattctggg gtcccataca cagtctgaca atcatctgag ggggctgtgg gaggacatag 2340
aaaaaataca gctttacata gaaaaaaatg caaattgtag ccaggcgcag tggctcatgc 2400
ctgtaacccc agcactttgg gaggccgagg caggtggatc acctgaggtc aggagtctga 2460
gaccagcctg gccaatgtag taaaactcct tctctactaa aaatataaaa attagccagg 2520
cgtgatgtca tgtgcctgta gtcccagcta ctcgggaggc tgaggcagga gaacctcttg 2580
aatccaggag gcgcaggttg cagtgagcag agatagtgcc actgcactcc agcctgggtg 2640
acagagtgag actctgtctc aaaaaaataa aataaaataa aaaatgcaga ctgtgattca 2700
gcaggtctgg gttgaagccc agaactctct gataaattca atggcactta actacttgga 2760
ggtcatggat gcctttgcta atctaataga agctactgac cctctctcca gaaaaatgca 2820
caaaaacata aatgtggaag acaactcctg atggatctgg gagcctatcc aagggccaca 2880
gacaagagtc ctggtctgga caaaatgagc tgctcagtat tttcccacct ggccagcatt 2940
tcctatccaa agacaaatgt taaagttgtt ctagcagagc catgcaccag cagcagtatc 3000
atcacctggg aaccggttag caatgcagaa ccgcaggccc accccaaacc tacagtcaga 3060
atctctactt tagcaagatc ctaaggagat gggtaagcac attacaattt gcaacctttg 3120
taagtttgcc caaaatgtga cccctccttc acccaccgat cgccaaggtt caaaaatctg 3180
cccaaccctt gagcccatct taaatgtacc atcacgagcc ttccctgggc ccctcagctg 3240
ggactctcac cgctctgtat ctttctggtt aatgcaatta ttctgttccc ttagatgacc 3300
```

```
ccagcacagg tgctaaagga gtcaacaaaa ggctattgtc aaaaaagtgt ttctgtctcc 3360
actccatctg atctctgttt ccctaagacc tgcccatccc cctctcccag ttcggcacct 3420
tgacccctc atcacactgc tcaggccacc ttgtacaatg caagccccaa atgaggaaag 3480
cattttctcc cccaatgtgt aacacgaaag tgctgtagag tggctcacgc tgcctttagc 3540
ctaagaattt atttaactct tacccccaac ccacatcagt ctcctccctc tagggctcag 3600
gtgctaatct gtgagggctg gctcagaaga caatctaaag aacaagcctc ttgcttcctc 3660
aggcatcact actcctcacc accatcaccc ccacccacca actcaggcca ctactctttc 3720
tgttctcata tgctatgccc atcgccaccc ctattcccat gctcaggagt attcttggct 3780
actgcatgca attagacctg gggcagatcc aatccagaaa gcaagaaatc ttagatgctg 3840
gaagcttggg gtaagtactg atcagattta ttcctaaatt cagtcctact ttccatggat 3900
tcttacttta gcatctcttc tgaaaaggaa gcatcatgtc taattcactt ctccctccct 3960
gtgcagtcct ctacctggtg ctctgcacag ggtatgtgct aattgtatga atgttataat 4020
aaagagatag tgcagtagat gacaaagggc actacattga gagcccagaa ataagcaaac 4080
cagcacaaat gtagccattc gtcttctatc tcaccttgag cctgtcacta acctgttcat 4140
ggcctcagtc tccccatcag agaaacaggt agatggtctc taaggtctcg ttcattttct 4200
gacattctgt gaaaaattaa ggaaagattt tcatccttga caggaaaggg attgcagagt 4260
agcggccctg ggaaaatggg ctctattcta cctggagcta gcctggagga gaggccttga 4320
gtgggggttg tctagaaagg acatggtgag tgcagagcta cggtgcatct ctcttgaagg 4380
ctgagtgaag ggagcaccag caagggagcc tgcactaggt ggggagggac aagtgaaccg 4440
cagaagttgg tgggagccca ggcagtggct tcagatcttt ccagagagct cacttttact 4500
tcctcttttt ttcacccctg acactgagtg ggagtctgca gcgatgacca aggttcatgc 4560
agaggatctt agtggtgggg tcagaccccg ggaggaatga agaaagcatt attcaccaag 4620
aggagctttt ccattcttta tctatgagtt gatagagagg aggccccggg gtaactgagg 4680
attctggaca gcatcagagc attgaccctc attttcccca tagcccctct gggggccttt 4740
cccttgtgtg tccccaagcg agagtccaac caaggtttgt gccagagcct aacccaggct 4800
tgtgccgaga tgttcccagc acagccccat gtgagagctc cctggctccg ggcccagtat 4860
ctggaatgca ggctcagcc aaatgcattc tcttctacgg gatctgggaa cttccaaagc 4920
tgcctcctca gagtgggaat ttccactcac ttctctcacg ccagcactga cctcccagcg 4980
ggggagggca tcttttcttg acagagcaga agtgggaggc agacagctgt cactttccag 5040
aagactttct tttctgattc atacccttca ccttccctg gtttactgtc tgatatatgc 5100
aaaggccaag tcactttcca gagatgacaa ctccttcctg aagtagagac atgcttccaa 5160
cactcagaag cctatgtgaa cactcagcca gcaaagctgg gaagtttttc tctgtgacca 5220
tgggctaatt ggtctccttc tctggattgt ggctttatca gataaaaaca agtggtcatg 5280
ccacaggatg tctataagcc cattgattct gggattctat gagtgatgct gatatgacta 5340
agccaggaga gacttatttta aagatctcag catctttcag cttgttaacc tagagaaaac 5400
ccgaagcatg actggattat aaagggaaat tgaatgcggt ccaccaagtt catggtaaag 5460
gatgcactaa cagattagag agaggtttcc cctgatatga ggaaaacttc ttggaagatg 5520
aggtgagatg gcctaggaag aaattcctac acaaagttgc acagtctcta gtcctggaaa 5580
cattttattc attggataag aatggattga ggcatgagca gaggactgag acaaacacag 5640
agaagtttca acactggttg gggagaaaag gagtaactag tgagattcag gcagaacaag 5700
aataaggctc ctcaagaggc acaagcaaag cagggctcga gttgatttgt tctctcttca 5760
tcctgctttt tgtaattcca ccagagtctg aaatggccac tccatagagt ctctgctctg 5820
ggattctcca ggaaaccaat atccatcatg agacatcaag tctagtccca ggaagaagag 5880
attctggaat ggaaacatcc tgggtgggag tctcagcaca tctactattc tgtctgagtt 5940
actggacaaa taacttcagt tttaacctaa cgaaagctgg gttggttgga ggactgggca 6000
ggcagcgctg gaaagtatgt cagcaccata cctgactccc tgaatgcact caacaatgcc 6060
attactgacc acttactaga aataaaacag tcatttgttg aatacaaccc gtttctttt 6120
acaagtgtag tgaaaagtgt tttcttcaa gaaacccat gcattatag acattgcctc 6180
agtgacctt tatgaaagaa gtcactagtc tttgtatgcc cattgggcaa gggcaccgca 6240
aggctcagaa ggaggaggca gtgggctagg agaatcgaga gatcagaatt ttaaactcag 6300
cccagccatt aacatgcctc aagtactcct atcatatttg taagagacaa cagttcactg 6360
aaatgaattc taaggtcttt gggtttttat cagtgtgctt ctgtagtttc tgaggaaatc 6420
taaggcacaa ctgaggaatg aagtcaggct ttccaattcc cgaaatactc ctccactgct 6480
tactcatgtc ccatggaaat taagaaggaa gccaggagaa tagctgccat aaccagggat 6540
gaacttcttg tccactgctg cctgctatgc tagcaacagc ctcctaactc ataatgactt 6600
agccatgagg aatgtttcta gattctcctt tagctgtctg cccatttgga agatgctgag 6660
gacagagaga ggacccaagc aggcaactag ttggaggact tgtacacgtt ccttccagc 6720
agtatgtcag agaggtggca gcccactggg gacagggctg cctgggttct gtgctcgagg 6780
ggaccttgag caggctattt aacccttctg tgcctcagtt gcctgatcta taacatgaaa 6840
```

```
attagcaatc cctactagat aaagttgggg aatttacaga gttaatattt gtaaaggtct 6900
gagaatattc ctggcagagt aagcactctg tgagtatgac actggcattt cttctgcagc 6960
actacatgct gtctatgcct ttgtccaagt ctgaaaccct agaactctta gaattcagtt 7020
caatgtttac acaatcctac agttctgcta ggcttctatg atgctactat tctgcatttg 7080
aatgagcaaa tggatttaat gcattgtcag ggagccggcc aaagcttgag agctccttcc 7140
tggctgggag gcccccttgga atgtggcctg aaggtaagct ggcagcgagc ctgacatgct 7200
ttcatctagt ttcctcgctt ccttcctttt ctgcagtttt cgcttcacag aaagcagaat 7260
ccttaaaaat aaccctctta gttcacatct gtggtcagtc tgggcttaat ggcaccccat 7320
cctccccatt tgctcatttg gtctcagcag tgaatggaaa aagtgtctcg tcctgacccc 7380
ctgcttccct ttcctacttc ctggaaatcc acaggatgct gcatttgctc agcagattta 7440
acagcccact tatcactcat ggaagatccc tcctcctgct tgactccgcc ctctctccct 7500
ctgcccgctt tcaataagag gcagagacag cagccagagg aaccgagagg ctgagactaa 7560
cccagaaaca tccaattctc aaactgaagc tcgcactctc gcctccagca tgaaagtctc 7620
tgccgccctt ctgtgcctgc tgctcatagc agccaccttc attccccaag ggctcgctca 7680
gccaggtaag gccccctctt cttctccttg aaccacattg tcttctctct gagttatcat 7740
ggaccatcca agcagacgtg gtacccacag tcttgcttta acgctacttt tccaagataa 7800
ggtgactcag aaaaggacaa ggggtgagcc caaccacaca gctgctgctc ggcagagcct 7860
gaactagaat tccagctgtg aacccccaaat ccagctcctt ccaggattcc agctctggga 7920
acacactcag cgcagttact ccccccagctg cttccagcag agtttggggga tcagggtaat 7980
caaagagagg gtgggtgtgt aggctgtttc cagacacgct ggagacccag aatctggtct 8040
gtgcttcatt caccttagct tccagagacg gtgactctgc agaggtaatg agtatcaggg 8100
aaactcatga ccaggcatag cctattcaga gtctaaaagg aggctcatag tggggctccc 8160
cagctgatct tccctggtgc tgatcatctg gattattggt ccgtcttaat gacacttgta 8220
ggcattatct agctttaact ctgtccatta tcaatgttat atacccattt tacagcatag 8280
gaaactgagt cattgggtca aagatcacat tctagctctg aggtataggc agaagcactg 8340
ggatttaatg agctctttct cttctcctgc ctgccttttg cttttttcctc atgactcttt 8400
tctgctctta agatcagaat aatccagttc atcctaaaat gcttttcctt tgtggtttat 8460
tttccagatg caatcaatgc cccagtcacc tgctgctata acttcaccaa taggaagatc 8520
tcagtgcaga ggctcgcgag ctatagaaga atcaccagca gcaagtgtcc caaagaagct 8580
gtgatgtgag ttcagcacac caaccttccc tggcctgaag ttcttccttg tggagcaagg 8640
gacaagcctc ataaacctag agtcagagag tgcactattt aacttaatgt acaaaggttc 8700
ccaatgggaa aactgaggca ccaagggaaa aagtgaaccc caacatcact ctccacctgg 8760
gtgcctattc agaacacccc aatttctta gcttgaagtc aggatggctc cacctggaca 8820
cctataggag cagtttgccc tgggttccct ccttccacct gcgttcctcc tctagctccc 8880
atggcagccc tttggtgcag aatgggctgc acttctagac caaaactgca aaggaacttc 8940
atctaactct gtcctccctc cccacagctt caagaccatt gtggccaagg agatctgtgc 9000
tgaccccaag cagaagtggg ttcaggattc catggaccac ctggacaagc aaacccaaac 9060
tccgaagact tgaacactca ctccacaacc caagaatctg cagctaactt attttcccct 9120
agctttcccc agacaccttg ttttatttta ttataatgaa ttttgtttgt tgatgtgaaa 9180
cattatgcct taagtaatgt taattcttat ttaagttatt gatgtttaa gtttatcttt 9240
catggtacta gtgttttta gatacagaga cttggggaaa ttgcttttcc tcttgaacca 9300
cagttctacc cctgggatgt tttgagggtc tttgcaagaa tcattaatac aaagaatttt 9360
ttttaacatt ccaatgcatt gctaaaatat tattgtggaa atgaatattt tgtaactatt 9420
acaccaaata aatatatttt tgtacaaaac ctgacttcca gtgtttttctt gaaggaaatt 9480
acaaagctga gagtatgagc ttggtggtga caaaggaaca tgatttcaga gggtggggct 9540
tacattttga aggaatggga aagtggattg ccccggtct tctccactgg gtggtctcct 9600
ctgagtctcc gtagaagaat ctttatggca ggccagttag gcattaaagc accacccttc 9660
cagtcttcaa cataagcagc ccagagtcca atgaccctgg tcacccattt agcaagagcc 9720
caaccccat tccttttctc acagaccctg acccctgcat gcaattcttc ccttaacata 9780
ttgcaactgc cccctaactg ggctacccac ccccaatct gtacctctcc aattaatacc 9840
ccaacctgga gtaatacaga cactgccagt attaggaaat aaggaaagag ttaatcacca 9900
tagataagat gattagattg aagtttcata gagatgatga gacctgaact tattatttat 9960
gaatgaagaa ggcttttcta ggaaaattat aggatcatta agaaaggaga aggaagagtg 10020
ggagcaaata cctggaggta gaaatggtga tgatgtgtac atcaagcagg gagaaaacca 10080
atgaaccaga tgcgaattcg gcccacacc aatgtcaagg gatgacaatt agaaaggaag 10140
gttgagtcaa gggatttgaa tgttagggtg aaaagttact actcaactct gtaggttaaa 10200
aggaaacgtt gagaatcttc agtccaatga ggagggatgt gccatgttta gagattcaga 10260
gataagtttc aggaaatgta acttatagat tttatacata cacagagaaa tacggactag 10320
tgagaagcta ttgccatggt ccaagcaaga gatgatgaag gcctaaatat ggagccaaag 10380
```

```
aggcagcaat gaagaatgag ccatgcaggg tgaaatgctg catgttgtaa atggaggaga 10440
aagacctgtg acttcagata tgaaaacctc atcttcaacc cacattttaa gggggcagct 10500
tccctgaaac cagaatgtgt ttccctccat tactataccc ccatcccaat ctcaggcacc 10560
tggaatcatc catttaaaca gatgagcctt ctattcctaa atagccacct gaagtgtgta 10620
ttcctttgca tgatatttgt cccacctaaa gcattcgacc tgcctgggca cccacaccac 10680
gccaacactc aggaaagcag atgtcttgct ctgttgaata aactgcatgg ttcttaactt 10740
cccagtctgg tggggaaatg accactgtgt caacctagag caggcagtgc ttttggcagc 10800
atgaggtgct ggggacaact ttgactggca agaagcacac tcaggttctc accccgcatc 10860
cagcgctgac tcgctttgtc agtcaagaca ggtcagatat tctgagccta catcgatcat 10920
acaggtatga taatgtgtta caaataggaa cccagaggaa aggttccctt tcggatctgg 10980
gagcacatct gttggaaaac ttccatttct actaactgga gttgcagagg gagagaaggg 11040
attctgcttc tacattcctg agccagtcca gggtccctga atcagactac cgaatccctt 11100
caaagctcca agtaccctga tatatcagtc agcagacaat ttattgacag ctatttagaa 11160
aactcactga ccctcactcc aggtcaagca gcgtcccctg cctctcctct acccctacat 11220
tccctggcct tgatcaccag tcaggagtga aatctcaaat tgcagtagat gccaagaggc 11280
aaaaagagaa tagaatgcaa acaaatgaga cctcatcata tggcttccga gcagcaacct 11340
tttgacgcca ggcagatttg aggcagacag tctgggagga gaggaggcag agaaagggggg 11400
gatccacatg ctcaaacccc aaattaatct gcttacattc cccttgcagg ccacatctct 11460
tcattttcag gaagtcttga ctccatactg tttttccaccc aagcatggaa ttcctttcat 11520
gatgaaactg aacacagggc attggcagtg gtgagactct gttttagaag aaagtgccaa 11580
gtgcaatgca ttcatttcct gttgctgcca acaatcagtt ccaggaaatc taggcttttt 11640
atgtcatgct caaaattctt ccagcctatg ctcattattc aaatccaaag ccacatccac 11700
atctgtaggt gttagttaca gaagcaccat atttccaggt accaaaatct gtattagttt 11760
cttattgtta ctgtaacaaa ttcccataag ctt                             11793
```